

# **Bureau of Chemical and Environmental Services**

## **Organic Environmental Testing**

Organic chemistry involves the carbon and the many different chemicals it can form. Everything from oil and gasoline components to pesticides and herbicides, disinfection byproducts from ozone and chlorine used in water treatment, detergents, which may enter the environment or public water supplies are monitored in this section of the laboratory.

Hazardous Waste Sites may judge the effectiveness of cleanup efforts based on the results of organic environmental testing. The section also monitors organic chemicals which are under consideration by EPA for future regulation based on their occurrence, known as unregulated volatile organic chemicals. We are also capable of measuring concentrations of organic chemicals called geosmin and methyl isoborneol which are chemical byproducts from algae growth which can cause significant taste and odor problems in public water supply raw water prior to treatment.

The types of routine tests (which may contain as many as 70 chemicals in one method) we routinely run are: BTEX compounds, Carbamates, Glycols, Haloacetic Acids (HAAs), Geosmin and MIB, Herbicides, Oil & Grease, Pesticides, Semi-Volatile Organic Chemicals (SVOCs), Phase II and Phase V Pesticides, Polychlorinated BiPhenyls and Organochlorine Pesticides, Surfactants, Total Petroleum Hydrocarbons (TPH), Toxicity Characteristic Leach Procedure (TCLP-Organics), Trihalomethanes (THMs), and Volatile Organic Chemicals (VOC).